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JUL 27 2009

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims

Claim 1 (currently amended): [[Data]] A data processing method in a scanning microscope with a fast scanner, ~~characterized by the following steps~~ comprising:

acquisition of data blocks in real-time with a fast scanner;

transmission of the ~~acquired~~ data blocks to a computer system [[(23)]]; and

the computer system processing of [[the]] selected data blocks [[as]] before other data blocks, the selection being a function of a frame burst ratio [[(N)]].

Claim 2 (currently amended): ~~Method~~ The method according to claim 1, ~~characterized in that the transmission of the acquired data blocks is a function of the frame burst ratio (N), in which case~~ wherein the frame burst ratio [[(N)]] is selected ~~such that~~ for optimal ~~utilization~~ performance of the computer ~~system's (23) performance ensues~~ system.

Claim 3 (currently amended): ~~Method~~ The method according to claim 2, ~~characterized in that~~ wherein the frame burst ratio [[(N)]] is selected by [[the]] a user as a function of the processing characteristics of the computer system, ~~and in that it remains constant during acquisition of the data blocks~~.

Claim 4 (currently amended): ~~Method~~ The method according to claim 3, ~~characterized in that~~ wherein all data blocks ~~($35_1, 35_2, \ldots, 35_n$)~~ are stored in the computer system ~~(23), and in that those data blocks that are specified by the constant frame burst ratio (N) are processed~~ before processing of the selected data blocks.

Claim 5 (currently amended): ~~Method~~ The method according to claim 1, ~~characterized in that~~ wherein adaptive control ~~is envisioned that~~ makes the frame burst ratio [[(N)]] variable.

Claim 6 (currently amended): ~~Method~~ The method according to claim 5, ~~characterized in that~~ wherein an initial value is specified for the frame burst ratio [[(N)]] at the start of data acquisition.

Claim 7 (currently amended): ~~Method~~ The method according to claim 6, ~~characterized in that~~ wherein ~~the frame burst ratio (N) determines the frequency of the transmitted data blocks and of the on/off ratio, respectively, and is adapted to the current performance of the computer system (23); in that~~ all data blocks ~~(35_1, 35_2, . . . , 35_n)~~ are stored in the computer system ~~(23); and in that these data blocks that are specified by the variable frame burst ratio (N) are processed~~ before processing of the selected data blocks.

Claim 8 (currently amended): ~~Method~~ The method according to claim 1, ~~characterized in that the frame burst ratio (N) is selected by the user as a function of the processing characteristics of the computer system (23) and remains constant during acquisition of the data blocks, and in that at the same time only those~~ wherein the selected data blocks ~~that correspond to the fixed frame burst ratio (N) specified by the user~~ are transmitted to the computer system ~~(23) and are processed by the computer system (23)~~ before the other data blocks.

Claim 9 (currently amended): ~~Method~~ The method according to claim 8, ~~characterized in that~~ wherein the other data blocks ~~that have not yet been transmitted~~ are transmitted to the computer system ~~(23) with a delay~~ and ~~are then~~ processed after the selected data blocks.

Claim 10 (currently amended): ~~Method~~ The method according to claim 1, ~~characterized in that~~ wherein the frame burst ratio ~~(N) is selected as a function of the processing characteristics of the computer system (23) and are~~ is adapted by the computer system during acquisition of the data blocks; and in that at the same time only ~~those~~ selected data blocks ~~that correspond to the variable frame burst ratio (N)~~ are transmitted to the computer system [[(23)]].

Claim 11 (currently amended): ~~Method~~ The method according to claim 10, ~~characterized in that~~ wherein the other data blocks ~~that do not correspond to the variable frame burst ratio (N)~~ are transmitted and/or processed to the computer system ~~(23) with a delay~~ after the selected data blocks.

Claim 12-17 (canceled)